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EXAMINER	
FETZNER, TIFFANY A	

ART UNIT	PAPER NUMBER
2859	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/074,826	Applicant(s) Stuart M. Gleman
	Examiner Tiffany Fetzner	Art Unit 2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Feb 12, 2002*.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-39* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *Feb 12, 2002* is/are a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "30" has been used to designate both a "sending antenna" [See page 19 line 20] a "detecting antenna" [See page 19 line 25] and a "transmitting antenna" [See page 20 line 7]. If applicant wishes to state that antenna 30 performs all of these functions, all of the adjectives used to describe antenna component 30 should be mentioned the very first time antenna component 30 is mentioned, in order to establish proper antecedent basis. The examiner notes that Figure 1 refers to component 30 as a "receiver" antenna which is a fourth difference. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "30" has been used to designate both an antenna in the specification, figure 1 and "a source" in figure 2. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

A) All of the reference number shown in connection with figure 3, that relate to the different beams of energy are not referenced in the specification.

. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to because

A) Applicant's specification only refers to a figure 4 but applicant's figures include both a 4a and a 4b.

B) Figures 4a. 4b and 5 are unreadable by the examiner. New legible figures of figure 4a, 4b and 5 are needed by the examiner to ensure that these figures meet the drawing requirements of examination. The examiner notes that with respect to figures the requirements of examination and the requirements which need to be met to satisfy the official draftsperson, are different. For draftsperson requirement corrections see the attached PTO 948 form. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. Applicant is required to submit a proposed drawing correction in response to this Office Action. Any proposal by the applicant for amendment of the drawings to cure defects **must consist of two parts:**

A. A separate letter to the Draftsman in accordance with M.P.E.P. (608.02(r); and

B. A print or pen-and-ink sketch showing changes in red ink in accordance with M.P.E.P. (608.02(v)).

IMPORTANT NOTE: The filing of new formal drawings to correct the noted defect may be deferred until the application is allowed by the examiner, but the print or

pen-and-ink sketch with proposed corrections shown in red ink is required in response to this Office Action, and *may not be deferred.*

Specification

6. The abstract of the disclosure is objected to because it is to long. The maximum length of an abstract is 150 words or 15 lines typed double spaced, as per the new abstract rules implemented March 2001. A new abstract on a separate piece of paper is needed. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 1-9, 11-36** are rejected under **35 U.S.C. 102(b)** as being anticipated by **Murphy** US patent 5,227,797.

9. With respect to **apparatus Claim 1**, and corresponding **method claim 22**, **Murphy** teaches "A radio-frequency" radar "imaging system" and "method" "for noninvasively imaging the internal structure of an object, person or animal" comprising: means for generating a beam comprised of radio frequency signals," [See col. 2 line 62 through col. 3 line 1, and the abstract] where "said signals having a particular wavelength, that is to be passed through said object;" [See col. 2 lines 1-2, col. 1 lines 55-68, col. 2 lines 16-48; col. 4 lines 21-68]. **Murphy** also teaches a "means for transmitting said beam toward said object;" (i.e. transmitter 18 shown in Figure 1) a

"means for receiving said beam after said beam has passed through said object;" (i.e. receiver 22 shown in Figure 1), a "scanning means for providing images of said object's internal structure;" [See abstract, Figure 1] **Murphy** shows and teaches a "means for generating said images of said object's internal structure;" [See abstract, Figure 1, col. 2 line 62 through col. 6 line 34] "and" a "means for displaying said images of said object's internal structure". [See Figure 1 video display component 30].

10. With respect to **apparatus Claim 2**, and corresponding **method claim 23**, **Murphy** teaches and suggests that "said radio frequency signals are comprised of a single frequency" [See col. 2 lines 62-65 where the example of a single radio frequency pulse is emitted as a specific energy (i.e. as a specific RF frequency).]

11. With respect to **apparatus Claim 3**, and corresponding **method claim 24**, **Murphy** teaches and suggests that "said radio frequency signals are comprised of multiple frequencies." [See col. 2 lines 65 through col. 3 line 1 where the example of varying the frequency and the intensity of each of as a series of pulses radio frequency is taught.]

12. With respect to **apparatus Claim 4**, and corresponding **method claim 25**, **Murphy** teaches and suggests as a "means for generating additional beams" [See duplexer 16, or the two antennae taught in col. 4 lines 4-10, "and" as a "means for transmitting additional beams" [See the aperture control device 10 of figure 1, col. 13 lines 51-62, and col. 4 lines 25-68 where the reception of the reflected pulses, and the scattering of the return pulses (i.e. col. 3 lines 9-12) into the receiver suggests that "additional beams of RF energy are generated and transmitted in the course of using the **Murphy** apparatus.] **Murphy** teaches and suggests "said means for

transmitting said additional beams" (i.e. the aperture control component 10 in Figure 1) is "situated proximate said object in order to obtain localized RF energy cross-beam information." [See figure 1, col. 3 lines 51-62, col. 5 lines 27-35 where the fact that each view is scanned in the x and y direction directly suggests, at least two beams of RF energy and localized cross-beam information.]

13. With respect to **apparatus Claim 5**, and corresponding **method claim 26**, **Murphy** teaches and suggests "said additional beams are comprised of radio frequency signals, each of as a different frequency" because the reflected pulses, (i.e. the scattered beams of reflected RF energy, that are scanned in the x and y directions by aperture control 10), are taught to include various rf frequencies, based on the type of echo desired. [See col. 2 line 62 through col. 3 line 12; col. 5 lines 27-35, figure 1] Therefore each transmitted and reflected RF pulse/beam is taught to be comprised of radio frequency signals, each of as a different frequency". [See col. 2 line 62 through col. 3 line 12].

14. With respect to **Claim 6**, **Murphy** shows and suggests from Figure 1 that "said scanning means is physically connected to said beam transmitting means and said beam receiving means and moves one or both in as a linear orientation proximate said object in order to measure said beam's attenuation and to create an X-Y planar scan of said object representing as a spatial position of said beam through said object." [See Figure 1, abstract, col. 2 line 62 through col. 6 line 15].

15. With respect to **Claim 7**, **Murphy** shows and suggests from Figure 1 that "said scanning means is physically connected to said beam transmitting means and beam receiving means" [See Figure 1] "and moves one or both in as a rotational orientation about said object, and moves one

or both along said object, in order to measure said beam's attenuation as a function of axial position and azimuth angle scan of said object representing attenuation of the beam as as a function of as a spatial position of said beam through said object." [See col. 5 lines 19-35, col. 4 lines 41-68]

16. With respect to **Claim 8**, **Murphy** teaches and suggests said "signal transmitting means is as a parabolic reflector antenna." [See col. 3 lines 41-47].

17. With respect to **Claim 9**, **Murphy** teaches and suggests said "signal transmitting means is as a cassegrain antenna." [See col. 3 lines 44-47].

18. With respect to **Claim 11**, **Murphy** teaches and suggests said "said signal transmitting means is as a waveguide" (i.e. as a slit aperture control component 10 is inherently as a functional waveguide means, because it directs the electromagnetic RF pulses, so that they are emitted in as a beam like path. [See component 4 of figure 1 emitted from component 10 in figure 1.] **Murphy** also teaches and suggests "as a beam having as a small aperture", because the aperture control device 10, (i.e. the two plates with slits moving in opposite directions of col. 3 lines 51-62, uses as a slit size aperture, and conventionally slits are by definition, inherently "small" apertures. to

19. With respect to **Claim 12**, **Murphy** teaches and suggests said beam may have "as a width greater than the wavelength of said radio frequency signals" because **Murphy** teaches that RADAR uses as a wavelength of several meters to several millimeters, [See col. 2 lines 1-2] and Figure 1 shows as a beam with as a width that is greater than several millimeters, [See Figure 1] therefore the range of wavelengths taught by **Murphy** include at least range of frequencies where the width of the beam is "greater than the wavelength of said radio frequency signals" .

20. With respect to **Claim 13**, **Murphy** suggests "said signal beam is comprised of spherical wavefronts", because in figure 1 aperture control 10 is geometrically convex in shape with component 14, (i.e. the cone or cylindrical spacer taught in col. 3 lines 33-43) directing the emitted radio wave beams to the patient.

21. With respect to **corresponding apparatus Claims 14** and **15** which depend from apparatus claims **1** and **5** respectively, and **corresponding method claims 31** and **32** which depend from method claims **22** and **26** respectively, **Murphy** teaches and suggests that "said beam receiving means are situated within said beam's path", because the receiver or receiving means is in direct electrical connection with antenna 8, and antenna head 6, and the receiver of **Murphy** is taught to receive the plurality or reflected radar pulses which correspond to the emitted plurality of radar pulses reflected from internal structure within the object. [See abstract, Figure 1] The examiner also notes that the receiver means must be in the path of the reflected beam signals, because those signals are what the receiver is detecting. Additionally, **Murphy** teaches and suggests that "said beam receiving means" (i.e. the duplexer 16 and receiver 22 of Figure 1) is "for measuring as a ratio of received signal power to transmitted signal power." [See col. 4 lines 4-40; col. 3 lines 1-12 where the need to control/monitor the transmitted energy so as not to harm the receiver by means of as a duplexer, directly suggests that the signal power that is received and transmitted (i.e. as a measurement ratio) is regulated within the teachings of the **Murphy** reference.

22. With respect to **corresponding apparatus Claims 16** and **17** which depend from apparatus claims **1** and **5** respectively, and corresponding **method claims 31** and **32** which depend

from method claims **22** and **26** respectively, **Murphy** teaches, shows, and suggests "one or more auxiliary detectors" (i.e. matrix filter 12 which functions to reduce the diffraction noise from the reflected return signals, and focus the emitted radar energy on the area of interest.) [See col. 3 line 63 through col. 4 line 3; col. 5 line 58 through col. 6 line 7; col. 2 lines 38-44; col. 3 lines 1-25; Figures 1, 2.] The examiner notes that because matrix filter 12 responds to the reflected radar signals from the patient/object, matrix filter 12 is as a type of "auxiliary detector" that is "coupled to said beam transmitting means and said beam receiving means", [See Figure 1 where filter 12, (i.e. see also figure 2 which shows matrix filter 12 in detail), is electrically coupled to the transmitter and receiving components of figure 1. **Murphy** also teaches, shows, and suggests that "said auxiliary detector is situated at predetermined angles in relation to the path of said beam(s) in order to gather additional information regarding RF energy scattered out of said beam(s)." [See col. 3 line 63 through col. 4 line 3; col. 5 line 58 through col. 6 line 7; col. 2 lines 38-44; col. 3 lines 1-1-25; Figures 1, 2.]

23. With respect to **apparatus Claim 18**, and corresponding **method claim 33**, **Murphy** teaches, shows, and suggests that "one or more auxiliary detectors" (i.e. the matrix filter 12) "is/are sensitive to as a frequency caused by interaction" (i.e. the scattering, and diffraction) "of said beams with the internal structure or organs of said object". [See col. 3 line 63 through col. 4 line 3; col. 5 line 58 through col. 6 line 7; col. 2 lines 38-44; col. 3 lines 1-25; Figures 1, 2, and the abstract.]

24. With respect to **apparatus Claim 19**, and corresponding **method claim 34**, **Murphy** teaches, shows, and suggests that "said object is as a live human or animal and said interaction of

said beams produces as a therapeutic effect" [See col. 1 lines 55-68; col. 3 lines 26-43; and figure 1].

25. With respect to **apparatus Claim 20**, and corresponding **method claim 35**, **Murphy** teaches, shows, and suggests that "said beam receiving means further comprises an effective detector aperture less than or equal to one wavelength of the transmitted and received radio frequency signals" because **Murphy** teaches that RADAR uses as a wavelength of several meters to several millimeters, [See col. 2 lines 1-2] and using one aperture slit at as a time to either emit of receive the radio signals. [See col. 3 lines 51-62] Because "slits" used with electromagnetic radiation are conventionally less than several millimeters, (i.e. they would be referred to as an opening, or as a rectangular aperture with as a specified size otherwise) and the wavelength range of **Murphy** is between several millimeters to several meters, [See col. 2 lines 1-2] the detection aperture taught by the **Murphy** reference is inherently "less than or equal to one wavelength of the transmitted and received radio frequency signals".

26. With respect to **Claim 21**, **Murphy** teaches, shows, and suggests "as a imaging system for noninvasively scanning people or objects" [See abstract, figure 1, col. 1 lines 52-68; col. 2 line 13 through col. 6 line 35] **Murphy** also teaches, shows, and suggests as a "means for generating as a beam comprised of radio frequency signals, [See col. 2 line 62 through col. 3 line 1, and the abstract] where "said signals having as a particular wavelength, that is passed through said person or said object;" [See col. 2 lines 1-2, col. 1 lines 55-68, col. 2 lines 16-48; col. 4 lines 21-68]. **Murphy** also teaches as a "means for transmitting said beam toward said person or said object;" (i.e. transmitter 18 shown in Figure 1) as a "means for receiving said beam after said beam has

passed through said person or said object;" (i.e. receiver 22 shown in Figure 1), as a "scanning means for providing images of said person or said object's internal structure;" [See abstract, Figure 1] as a "means for generating said images of said person or said object's internal structure; " [See abstract, Figure 1, col. 2 line 62 through col. 6 line 34] "and" as a "means for displaying said images of said person or said object's internal structure." [See Figure 1 video display component 30].

27. With respect to the limitation that the imaging system comprise as a "as a 'security' imaging system for noninvasively scanning people or objects". The teachings of **Murphy** suggest this feature because **Murphy** teaches that RADAR receivers are available which can image an object at great distances registering as a small fraction of the radiated energy, and that RADAR technology is well developed in military and civilian aviation, traffic enforcement, and is capable of forming an image by simple reflection off of an object. [See col. 1 line 52 through col. 2 line 10] Therefore, the ability to scan as a person or object from as a distance, and obtain an image based upon the person or objects reflected energy, noninvasively, and without injury to the individual or object, is directly suggestive of an implementation, of the **Murphy** apparatus, for as a security usage or application concerning military situations, civilian situations, objects, and traffic enforcement.

28. With respect to **Claim 27**, **Murphy** teaches, and suggests "the steps of measuring said beam's attenuation and creating an X-Y planar or planar tomographic scan of said object representing as a spatial position of said beam through said object." [See col. 2 lines 30-47; col. 2 line 62 through col. 6 line 15].

29. With respect to **Claim 28**, **Murphy** teaches, and suggests "the steps of measuring said beam's attenuation to create an attenuation map", [See col. 2 lines 30-47; col. 2 line 62 through col. 6 line 15]. creating as a three-dimensional cylindrical tomographical scan of said object representing as a spatial position of said beam through said object, and processing the attenuation map to yield an image of internal organs or structures of the object." [See abstract, col. 2 lines 13-47; col. 2 line 62 through col. 6 line 15; Figure 1, cone or cylindrical spacer 14].

30. With respect to **Claim 36**, **Murphy** teaches, and suggests "as a system for noninvasively affecting, processing or interacting with internal structures, subsystems and/or components of an industrial object or system" [See abstract, col. 1 line 55 through col. 6 line 15] **Murphy** also teaches, and suggests "means for transmitting one or more scanned beams of radio frequency energy wherein each said beam has as a different frequency, through the object or the system such that the radio frequency energies are delivered to as a volume of intersection of said beams, and wherein combinations of said frequencies interact specifically with said internal structures, said subsystems and/or said components to create as a desired effect." [See abstract, col. 2 line 13 through col. 6 line 15, and col. 1 lines 58-62]

31. ***Claim Rejections - 35 USC § 103***

32. The following is as a quotation of 35 U.S.C. 103(as a) which forms the basis for all obviousness rejections set forth in this Office action:

> (as a) as a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as as a whole would have been obvious at the time the invention was made to as a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

33. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing as a background for determining obviousness under 35 U.S.C. 103(as a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

34. **Claims 37-39** are rejected under **35 U.S.C. 103(as a)** as being unpatentable over **Murphy** US patent 5,227,797.

35. With respect to **apparatus Claim 37**, and corresponding **method claim 38** which depends from **apparatus claim 1** and **method claim 22** respectively, **Murphy** teaches, and suggests as a "computer means" [See Figure 1 components 32, 38, and 40 in combination] "for comparing said generated images of said object with actual images of said object, said actual images of said object stored in as a computer storage medium," [See col. 2 line 13 through col. 6 line 15; abstract] **Murphy** lacks directly teaching that "said means for comparing" (i.e. viewing on the display multiple images of the object obtained with the device) is used "to determine if said object is missing components, and if said object is as a human or animal, to determine if said object is missing an internal organ or has broken or damaged an internal organ", or that "said computer means capable of correcting said generated image to more closely match said stored actual image." However, It would have been obvious to one of ordinary skill in the art, at the time that the invention was made to modify the teaching of **Murphy** to include as a determination of the type of object, the lack or presence of features, and as a correction technique to align and

enhance stored and current images because **Murphy** specifically teaches that the device is useful in clinical, medical imaging modalities, [See col. 1 lines 12-24] and conventionally, doctors desire to compare scans of patients prior to an accident or illness, or surgical procedure with scans taken after an injury, accident, surgical procedure, or illness to accurately diagnose the problem/treatment for as a patient, or to determine how well as a patient (i.e. as a human or animal) is healing. Additionally, the step of "correcting said generated image to more closely match said stored actual image", is also conventionally well-known and highly desirable to medical physicians because this feature enables as a proper comparison, of the medical images obtained, especially if as a physician is attempting to compare diagnostic images of the same patient from the different imaging modalities of NMR, MRI , ultrasound, PET, x-ray CT, digital subtraction angiography and x-rays which are some of the modalities taught by **Murphy** in col. 1 lines 12-24.

36. With respect to **Claim 39**, **Murphy** suggests software instructions stored in said computer storage medium, said software instructions to compensate for diffraction effects from the object." [See Figure 1, col. 2 line 13 through col. 6 line 15, columns 3 lines 3-13; and col. 5 lines 58 through col. 6 line 15 cover diffraction the ability to use conventional processing techniques and algorithms to process the reflected signals is taught throughout the reference.] The examiner notes that unless otherwise stated conventional diagnostic imaging devices conventionally implement the procedural commands with specific software, therefore the presence of operational software to carry out the processed steps is considered to be an inherent aspect of any computer/processor device used to implement as a given imaging procedure. Additionally,

proper software with computer implementation is required in the diagnostic imaging arts because the conventional diagnostic imaging techniques would not be implementable without as a computer/processor due to the number of numerical calculations involved. Diagnostic medical imaging is not performable mechanically by hand.

37. **Claims 1, 10** are rejected under **35 U.S.C. 102(b)** as being anticipated by **Schaefer et al.**, US patent 4,712,560.

38. With respect to **Claim 1**, **Schaefer et al.**, teaches "as a radio-frequency" MRI "imaging system for noninvasively imaging the internal structure of an object, comprising: means for generating as a beam comprised of radio frequency signals," [See RF coil 238 col. 6 lines 28-42] where "said signals having as a particular wavelength, that is to be passed through said object;" [See col. 8 lines 18-30].**Schaefer et al.**, also teaches as a "means for transmitting said beam toward said object;" [See RF coil 238 col. 6 lines 28-42] as a "means for receiving said beam after said beam has passed through said object;" (i.e. the horn antenna of col. 11 line 33 through col. 14 line 27), and as a "scanning means for providing images of said object's internal structure;" [See Figure 1, col. 3 line 18 through col. 14 line 27] **Schaefer et al.**, shows and teaches as a "means for generating said images of said object's internal structure;" [See Figure 1, col. 3 line 18 through col. 14 line 27] "and" as a "means for displaying said images of said object's internal structure". [col. 3 lines 31-44].

39. With respect to **Claim 10**, **Schaefer et al.**, teaches that said "signal transmitting means is as a horn antenna." [See col. 11 lines 38-58].

40. The **prior art made of record** and not relied upon is considered pertinent to applicant's disclosure.

as a) Murphy US patent 5,030,956 issued July 9th 1991, which is the parent application to the reference applied in this office action.

Conclusion

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tiffany Fetzner** whose telephone number is **(703) 305-0430**. The examiner can normally be reached on Monday-Thursday from 7:00am to 4:30pm., and on alternate Friday's from 7:00am to 3:30pm.

42. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Diego Gutierrez**, can be reached on **(703) 308-3875**. The fax phone number for the organization where this application or proceeding is assigned is (703)305-3432 .

43. Any inquiry of as a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0956.

Tiffany A. Fetzner

TAF

May 9, 2003

Diego Gutierrez
Supervisory Patent Examiner
Technology Center 2800